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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/592,976      | 09/15/2006  | Athanassios Tzikas   | 423032              | 4055             |

7590 12/16/2008  
Legal Department  
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| EXAMINER |
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ELHILO, EISA B

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| ART UNIT | PAPER NUMBER |
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1796

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12/16/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/592,976             | TZIKAS ET AL.       |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Eisa B. Elhilo         | 1796                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 9-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6 and 9-15 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/15/2006</u> .   | 6) <input type="checkbox"/> Other: _____                          |

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Claims 1-6 and 9-15 are pending in this application.

### **DETAILED ACTION**

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 10 are indefinite because the claims recite the limitations “D1 is the radical of a diazo component, which is itself, is a mono- or dis-azo dye or contains such a dye”. It is not clear what D1 represents is? Is it diazo, monoazo or dis-azo dye?. Also it is not clear what “such a dye” means is? Clarification and/or correction is/are required.

Claim 3 recites the limitations "Y is -----". There is insufficient antecedent basis for this limitation in the claim. In the specification at page 3, in paragraph, 7, these limitations are recited for “U” and not for “Y” as claimed. Clarification and/or correction is/are required.

#### ***Double Patenting***

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-2, 9 and 12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4, 7 and 10 of copending Application No. 10/551,319. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 4, 7 and 10 of the copending Application No. 10/551,319, teach and disclose a dye compound having a formula (I), which is similar to the claimed formula (I) (see claim 1 and 4 of the copending Application No. 10/551,319) when in the claimed formula (I), R1 and R2 are both hydrogen atoms and D1 and D2 are diazo components as claimed and wherein the dye is used in an aqueous ink or for dyeing fiber materials as claimed in claims 10 and 12 (see claims 7 and 9, of the copending Application No. 10/551,319). Therefore, this is an obvious formulation.

Although, the claims of the copending Application No. 10/551,310, teach and disclose similar dye compounds, they are not identical to the instant claims, because the claims of the copending application No. 10/551,319, require a dye mixture of formula (1) and formula (2), while the instant claims do not require such a mixture dye as claimed. Therefore, the conflicting claims are not identical.

However, the similarities in chemical structure between the prior art and the claimed compounds and which have similar utilities establishes a prima facie case of obviousness. (In re Payne, 203 VSPQ 245).

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This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Tzikas et al. (US 6,537,332 B1).

Tzikas et al. (US' 332 B1) teaches a dye compound having a formula identical to the claimed formula (1) (see cols. 19-20, formula 104) when in the claimed formula (1), Q1 and Q2 are hydrogen atoms, D1 is dis-azo dye and D2 is dis-azo dye of the claimed formula (2aa) as claimed in claims 1, 2 and 5. Tzikas et al. also teaches a process for the preparation of a dye as claimed in claim 6 (see col. 4, lines 63-66 and col. 5, lines 1-40). Tzikas et al. teaches all the limitations of the instant claims. Hence, Tzikas et al. anticipates the claims.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tzikas et al. (US 6,537,332 B1).

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Tzikas et al. (US' 332 B1) teaches a process for dyeing and printing a wide variety of materials especially hydroxy-group-containing or nitrogen containing fiber materials by applying a dyeing solution comprising a dye compound having a formula similar to the claimed formula (1) as claimed in claims 10-15 (see col. 9, lines 14-26) and wherein the solution is an aqueous printing pastes, which meet the claimed limitation of the ink as claimed in claim 9 (see col. 25, lines 1-12).

The instant claims differ from the reference by reciting a process comprising spraying an aqueous ink onto the substrate from a nozzle in a controlled manner.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize such a process for dyeing or printing substrate materials to arrive at the claimed invention because Tzikas et al. teaches that the dyes can be applied to the fiber materials and fixed to the fiber in a number of ways (see col. 9, lines 27-41), and, thus, a person of the ordinary skill in the art would expect such a process to have similar properties to those claimed, absent unexpected results.

#### ***Allowable Subject Matter***

5. Claim 4 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record do not teach or disclose a reactive dye of the claimed formula (1), in which D1 corresponds to a radical of formula (5) or (11) as claimed.

#### ***Conclusion***

6 The remaining references listed on from PTO-1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in

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the above rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B. Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pyon Harold can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eisa B Elhilo/  
Primary Examiner, Art Unit 1796  
December 12, 2008

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